CLAIMS

1.   A method of operating a plurality of networked computers each performing various functions comprising the steps of:

(a)   providing a first application computer at a first site for performing a first application task, a second computer at a second site for performing a second application task, and additional computers if and as needed for performing third and subsequent tasks at third and additional sites, each computer being coupled to the other computers via a network enabling communication between computers and each computer having a hardware unit for producing a hardware node ID identifying which node each computer is intending to act as;

(b)   providing a system manager means interconnected with the computers for downloading applications software thereto and for updating software therein;

(c)   inserting into each computer an application execution program having a logical node ID unique to the application to be executed by each computer at its associated site;

(d)   comparing the hardware node ID of the computer for each computer with the logical node ID of the applications program therein, and should there be a mismatch, reinserting a new applications program into the computer having an appropriate logical node ID equivalent to the hardware node ID;

(e)   providing a network mapping means for correlating the logical node IDs with appropriate associated physical site node IDs; and

(f)   comparing the logical node ID of the applications program for each computer with the logical node ID associated

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with the physical node of the computer as indicated by the network mapping means, and in the event of a mismatch, inserting the correct application program having the appropriate logical ID indicated by the network mapping means.

2.   The method of claim 1 further comprising the step of:
comparing the number of nodes that should be on the network as indicated by a system manager configuration file with the number of nodes actually on the network to ensure that the proper number of nodes are network operative.

3.   The method of claim 1 further comprising the step of:
setting switches associated with the hardware to effect the producing of said hardware node ID in step (a).

4.   The method of claim 2 further comprising the step of:
setting switches associated with the hardware to effect the producing of said hardware node ID in step (a).

5.   The method of claim 1 further comprising the step of:
providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

6.   The method of claim 2 further comprising the step of:
providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

7.   The method of claim 3 further comprising the step of:
providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

8.   The method of claim 4 further comprising the step of:

providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

9. The method of claim 1 further comprising the step of:

implementing network upgrades and changes by propagating the changes produced within the ~~program~~ _SYSTEM_ manager to all network nodes simultaneously. R.F. 1/22/2001   AND. 1/22/01

10. The method of claim 2 further comprising the step of:

implementing network upgrades and changes by propagating the changes produced within the ~~program~~ _SYSTEM_ manager to all network nodes simultaneously. R.F. 1/22/2001   AND 1/22/01

11. The method of claim 5 further comprising the step of:

implementing network upgrades and changes by propagating the changes produced within the ~~program~~ manager to all network nodes simultaneously. R.F. 1/22/2001   SYSTEM AND. 1/22/01

12. The method of claim 6 further comprising the step of:

implementing network upgrades and changes by propagating the changes produced within the ~~program~~ manager to all network nodes simultaneously. R.F. 1/22/2001   SYSTEM AND. 1/22/01

13. A method of operating a plurality of networked computers each performing various functions comprising the steps of:

(a) providing a first application computer at a first site for performing a first application task, a second computer at a second site for performing a second application task, and additional computers if and as needed for performing third and subsequent tasks at third and additional sites, each computer being coupled to the other computers via a network enabling communication between computers, and each computer having a

computer node ID identifying means producing a computer node ID specifying which node each computer is intending to act as;

(b)   providing a system manager means interconnected with the computers for downloading applications software thereto and for updating software therein;

(c)   inserting into each computer an application execution program having a software logical node ID unique to the application to be executed by each computer at its associated site; and

(d)   comparing the computer node ID of the computer for each computer with the logical node ID of the applications program therein, and should there be a mismatch, reinserting a new applications program into the computer having an appropriate software logical node ID equivalent to the computer node ID.

14.   The method of claim 13 further comprising the steps of:

(e)   providing a network mapping means for correlating said software logical node IDs with appropriate associated physical site node IDs; and

(f)   comparing the software logical node ID of the applications program for each computer with the logical node ID associated with the physical node of the computer as indicated by the network mapping means, and in the event of a mismatch, inserting the correct application program having the appropriate software logical ID indicated by the network mapping means.

15.   The method of claim 13 further comprising the step of:
comparing the number of nodes that should be on the network as indicated by the system manager configuration file with the

number of nodes actually on the network to ensure that the proper number of nodes are network operative.

16. The method of claim 14 further comprising the step of:
comparing the number of nodes that should be on the network as indicated by the system manager configuration file with the number of nodes actually on the network to ensure that the proper number of nodes are network operative.

17. The method of claim 13 further comprising the step of:
implementing network upgrades and changes by propagating the changes produced within the ~~program~~ system manager to all network nodes simultaneously. $QLDR.$ 1/22/01 $R.F.$ 1/22/2001

18. The method of claim 14 further comprising the step of:
implementing network upgrades and changes by propagating the changes produced within the ~~program~~ system manager to all network nodes simultaneously. $QLDR.$ 1/22/01 $R.F.$ 1/22/2001

19. The method of claim 13 further comprising the step of:
providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

20. The method of claim 14 further comprising the step of:
providing identical hardware units associated with each computer at each site, to facilitate flexibility in machine configuration and ease of maintainability.

21. A method of operating a plurality of networked computers each performing various functions comprising the steps of:

(a) providing a first application computer at a first site for performing a first application task, a second computer at a second site for performing a second application task, and

additional computers if and as needed for performing third and subsequent tasks at third and additional sites, each computer being coupled to the other computers via a network enabling communication between computers and each computer having means for producing a node ID code, identifying which node each computer is intending to act as;

(b) providing a system manager means interconnected with the computers for downloading applications software thereto and for updating software therein;

(c) inserting into each computer an application execution program having a logical node ID unique to the application to be executed by each computer at its associated site;

(d) comparing the node ID code of the computer for each computer with the logical node ID of the applications program therein, and should there be a mismatch, reinserting a new applications program into the computer having an appropriate logical node ID equivalent to the node ID code;

(e) providing a network mapping means for correlating said logical node IDs with appropriate associated physical site node IDs; and

(f) comparing the logical node ID of the applications program for each computer with the logical node ID associated with the physical node of the computer as indicated by the network mapping means, and in the event of a mismatch, inserting the correct application program having the appropriate logical ID indicated by the network mapping means.

22. The method of claim 21 further comprising the step of:
     comparing the number of nodes that should be on the network as indicated by the system manager configuration file with the

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number of nodes actually on the network to ensure that the proper number of nodes are network operative.

23. The method of claim 21 further comprising the step of:
    setting switches associated with the hardware to effect the producing of said hardware node ID in step (a).

24. The method of claim 22 further comprising the step of:
    setting switches associated with the hardware to effect the producing of said hardware node ID in step (a).